
Morning Reading 晨读

Grade 10 · Week 18

Read each word aloud, then copy the English word three times. 朗读每个单词，然后把英语单词抄写三遍。

Reading 阅读

Read the passage aloud twice. 把短文朗读两遍。

Look up on a clear night. Every star you see belongs to our **galaxy**, the **Milky Way**, a slowly turning city of more than one hundred billion stars. Distances in space are so huge that we measure them in **light-years**, the distance light travels in one year. When a giant star dies, it can explode as a **supernova**, and the heaviest ones collapse into a **black hole**, whose gravity is so strong that even light cannot escape. The **Universe** contains billions of galaxies like ours.

Astronomers keep their star data in databases and search it with **structured query language**. A **query** like `SELECT name FROM stars WHERE distance < 10` finds every star within ten light-years. Underneath, computers decide everything with **Boolean logic**: an **AND gate** outputs true only if both inputs are true; an **OR gate** needs just one. A **truth table** lists every case.

Money also travels between countries. The **exchange rate** is the price of one **currency** in another. When the yuan buys more dollars than before, it has seen an **appreciation**.

Talk about it 说一说:

1. If a star is 100 light-years away, when did the light you see leave it?
2. You are travelling abroad and the yuan appreciates. Is your trip cheaper or dearer? Why?

Physics

Topics 3-6 · Waves, Space physics

✧ **protostar** 原恒星

🔥 **fuel** 燃料

☁ **nebula** 星云

☆ red supergiant 红超巨星			
✦ supernova 超新星			
○ black hole 黑洞			
← receding 退行			
→ redshift 红移			
[] expanding 膨胀			
✦ Big Bang 大爆炸			
📡 microwave 微波			
☼ cosmic microwave background radiation 宇宙微波背景辐射			
↻ Hubble constant 哈勃常数			
🔌 optical fibres 光纤			
analogue 模拟			
digital 数字			
loudness 响度			
pitch 音调			
Ultrasound 超声波			
The electromagnetic spectrum 电磁波谱			

Chemistry

Topics 7–12 · Acids, bases and salts, Organic chemistry, Experimental techniques and chemical analysis

📊 chromatogram 色谱图			
💎 crystallisation 结晶			

 simple distillation 蒸馏			
 carbonate 碳酸盐			
 chloride 氯化物			
 nitric acid 硝酸			
 silver nitrate 硝酸银			
 nitrate 硝酸盐			
 barium nitrate 硝酸钡			
 barium 钡			
 bromide 溴化物			
 iodide 碘化物			
 sodium hydroxide 氢氧化钠			
 sulfate 硫酸盐			
 sulfite 亚硫酸盐			
 ammonium 铵			
 limewater 石灰水			
 flame test 焰色试验			
effervescence 泡腾			
amide linkage 酰胺键			
ester linkage 酯键			

Biology

Topics 20–21 · Human influences on ecosystems, Biotechnology and genetic modification

 non-biodegradable 不可降解			
---	--	--	--

 plastics 塑料			
 methane 甲烷			
 greenhouse effect 温室效应			
 climate change 气候变化			
 sustainable 可持续			
 conserved 保护			
 quotas 配额			
 closed seasons 禁渔期			
 endangered 濒危			
 hunting 狩猎			
 introduced species 外来物种			
 captive breeding 圈养繁殖			
 artificial insemination 人工授精			
 in vitro fertilisation 体外受精			
 seed banks 种子库			
 drugs 药物			
 genetic variation 变异			
 biotechnology 生物技术			
 ethical 伦理			
 biofuel 生物燃料			
 pectinase 果胶酶			

 washing powders 洗衣粉			
 lactase 乳糖酶			
 lactose 乳糖			
 fermenter 发酵罐			
 penicillin 青霉素			
 mycoprotein 真菌蛋白			
 genetic modification 基因改造			
 protein 蛋白质			
 restriction enzymes 限制酶			
 sticky ends 黏性末端			
 ligase 连接酶			
 recombinant plasmid 重组质粒			
 express 表达			
 resistance 抗性			

Mathematics

Topics 4–9 · Geometry, Statistics

 pie chart 饼图			
 pictogram 象形图			
 stem-and-leaf diagram 茎叶图			
 frequency distribution 频数分布			
 scatter diagram 散点图			

 correlation 相关性			
 positive correlation 正相关			
 negative correlation 负相关			
 zero correlation 零相关			
 line of best fit 最佳拟合线			
 cumulative frequency 累积频数			
 percentile 百分位数			
 histogram 直方图			
 frequency density 频数密度			
 class width 组距			
 decagon 十边形			

Computer Science

Topics 3–6 · Hardware, Software, Automated and emerging technologies

fetch-execute cycle 取指 执行周期			
Cloud storage 云存储			
static 静态			
dynamic 动态			
firmware 固件			
bootloader 引导程序			
providing a user interface 用户界面			

managing peripherals 外围设备

managing multitasking 多任务处理

providing a platform 平台

assembler 汇编器

sensor types 传感器类型

accelerometer 加速度计

humidity 湿度

proximity 接近

knowledge base 知识库

rule base 规则库

inference engine 推理引擎

Machine learning 机器学习

Economics

Topics 4-6 · Government and the macroeconomy, International trade and globalisation

↘ depreciation 贬值

📁 current account 经常账户

📦 trade in goods 货物贸易

🏠 trade in services 服务贸易

💰 primary income 初次收入

📁 secondary income 二次收入

 current account deficit 逆差			
 current account surplus 顺差			
 competitiveness 竞争力			
% interest rates 利率			
primary sector 第一产业			
secondary sector 第二产业			
tertiary sector 第三产业			
deindustrialisation 去工业化			

English

Topics 7-11 · Writing a review, Speaking skills, Vocabulary and text types

 brehtaking 惊人			
 politely 礼貌			
 revise 复习			
 interrupts 打断			
 spaced review 间隔复习			
blog 博客			